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|   |             |                        |                     |                  |
|---|-------------|------------------------|---------------------|------------------|
| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR   | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/506,389  | 09/02/2004  | Frank Bastiaan Brouwer | P15217-US1          | 1674             |
| 27045   | 7590        | 10/02/2007             | EXAMINER            |                  |
| ERICSSON INC.<br>6300 LEGACY DRIVE<br>M/S EVR 1-C-11<br>PLANO, TX 75024 |             |                        | PEREZ, ANGELICA     |                  |
|   |             |                        | ART UNIT            | PAPER NUMBER     |
|   |             |                        | 2618                |                  |
|   |             |                        | MAIL DATE           | DELIVERY MODE    |
|   |             |                        | 10/02/2007          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/506,389

Applicant(s)

BROUWER, FRANK BASTIAAN

Examiner

Perez M. Angelica

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-14 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15 and 20 is/are allowed.
- 6) ☒ Claim(s) 11-14 and 16-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/23/2007 has been entered.

### ***Allowable Subject Matter***

2. Claims 15 and 20 are allowed.

### ***Response to Arguments***

3. Applicant's arguments filed 07/23/2007 have been fully considered but they are not persuasive.

In the remarks, the applicant argued in substance:

(A) In pages 8-9, the applicant argues, "...based on the Examiner's failure to properly cite the reference upon she apparently relied, the Applicant was denied the opportunity to present appropriate arguments...the Examiner should withdraw the finality of the present Office Action."

In response to argument (A), the examiner would like to apologize for the typographical error made. However, the Applicant has the obligation to review the rejection as well as the documentation that includes the references cited. The Applicant should have brought any inaccuracies found in the rejection or references to the

attention of the Examiner, at an earlier time, so that a Supplementary Office Action could have been provided, and the period for reply could have been resetted in order to give the applicant enough time to review the supplementary Office Action and respond to it. See MPEP 710.06.

(B) In page 9, the applicant argues, "...Takano II does not refer to determining a radio signal strength minimum...

In response to argument (B), the Examiner would like to point where the plus and minus bit values, correspond to the minima and maxima of detected strength (SIR), so that, the power can be increased (+), when a minimum strength is detected or the power is decreased (-) when a maximum strength value is detected. In this manner, a sequence of + or – gives an integrated result of maximum or minimum power signal strength in order to increase or decrease of power. See also column 2, lines 4-23, in the Takano II reference.

(C) In page 10, the applicant argues, "combining...the teachings of Kubo and Takano II...The examiner provides no support for the conclusory statement of obviousness...provides no motivation for such combination...the examiner has failed to establish a prima facie case of obviousness..."

In response to argument (C), the examiner would like to explain where both references derive the speed of the mobile station by analyzing the power control commands. The Takano reference further uses the speed indication for power control purposes. Therefore, there is a motivation to combine Takano and Kubo in order to calculate the speed of mobile devices in order to control power depending on the speed

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suffer power degradation or fading, therefore, increase of power is administered. At low speeds mobile stations do experience as much degradation, therefore, there is no need to increase power, although it can be decreased if required in order to accommodate other mobile stations experiencing degradation.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 11-13 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubo (Kubo et al.; US Patent No.: 6,249,682 B1) in view of Takano, Michiaki (Takano, US Patent No.: 5,924,043).

Regarding claims 11 and 16, Kubo teaches of an apparatus and method for determining a speed indication signal indicating a speed of a wireless mobile telecommunication device relative to the apparatus (column 1, lines 5-10), where the apparatus determines the speed indication signal from a sequence of transmit power control commands sent by the wireless mobile telecommunication device to an access point in a wireless telecommunication network (column 2, lines 16-29; figure 1, items "transmitter station" and "receiver station" and figure 6) for controlling, in use, a transmit power of a radio signal transmitted by the access point to the wireless mobile

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telecommunication device (column 2, lines 16-29; figure 1, items "transmitter station" and "receiver station").

Kubo does not specifically teach where the apparatus comprises a memory for storing the sequence of transmit power control commands and a logical filter circuit for determining a radio signal strength minimum in the radio signal at a location of the mobile telecommunication device by detecting if a predetermined number of consecutive transmit power control commands from the sequence of transmit power control commands each comprise either an 'up' or 'down' transmit power control command.

In related art concerning a method and apparatus for controlling transmission power in a cellular mobile communication system, Takano teaches where the apparatus comprises a memory for storing the sequence of transmit power control commands (column 13, lines 7-24 and 45-50) and a logical filter circuit for determining a radio signal strength minimum in the radio signal at a location of the mobile telecommunication device by detecting if a predetermined number of consecutive transmit power control commands from the sequence of transmit power control commands each comprise either an 'up' or 'down' transmit power control command (column 13, lines 16-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kubo's apparatus and method for combining speed in a mobile communication with Takano's sequence storage and detection of power control commands in order to calculate the speed of the mobile unit, as taught by Takano.

Regarding claims 12 and 17, Kubo and Takano teach all the limitations of claims 11 and 16, respectively.

Where Takano teaches where the logical filter circuit is adapted to identify if at least four consecutive transmit power control commands each comprise an 'up' transmit power control command by logically comparing the value of each of said at least four transmit power control commands (column 13, lines 20-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kubo's apparatus and method for combining speed in a mobile communication with Takano's sequence of at least four TPC in order to obtain speed measurements, as taught by Takano.

Regarding claims 13 and 18, Kubo and Takano teach all the limitations of claims 12 and 17, respectively.

Takano teaches where the logical filter circuit is further adapted to identify a start of the at least four consecutive transmit power control commands by comparing if a first of the at least four transmit power control commands is not equal to a preceding transmit power control command in the sequence of transmit power control commands (column 13, lines 13-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kubo's apparatus and method for combining speed in a mobile communication with Takano's comparisons in order to determine where the sequences of equal commands starts and subsequently quantify them, as taught by Takano.

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6. Claims 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubo in view of Takano and further in view of Yamamoto (Yamamoto et al; US Pub. No.: 2002/0,013,156 A1).

Regarding claims 14 and 19, Kubo and Takano teach all the limitations of claims 11 and 16, respectively.

Kubo and Takano do not specifically teach where a speed information control device for providing a speed estimation signal for the wireless mobile telecommunication device; and a Doppler frequency measurement device for determining a Doppler speed signal for the wireless mobile telecommunication device, the apparatus being adapted to provide the speed estimation signal in dependence on the speed indication signal for speeds of the wireless mobile telecommunication device below a predetermined threshold and on the Doppler speed signal for speeds above the predetermined threshold.

In related art concerning a communication system, transmitter, receiver and method Yamamoto teaches where a speed information control device for providing a speed estimation signal for the wireless mobile telecommunication device (paragraphs 26-27); and a Doppler frequency measurement device for determining a Doppler speed signal for the wireless mobile telecommunication device (paragraphs 42-43), the apparatus being adapted to provide the speed estimation signal in dependence on the speed indication signal for speeds of the wireless mobile telecommunication device below a predetermined threshold and on the Doppler speed signal for speeds above the predetermined threshold (paragraphs 54-55).



It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kubo and Takano apparatus and method for combining speed in a mobile communication with Yamamoto's Doppler frequency measurement and comparison in order to obtain satisfactory interleave between frames, as taught by Yamamoto.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angelica Perez whose telephone number is 571-272-7885. The examiner can normally be reached on 6:00 a.m. - 1:30 p.m., Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571) 272-4177. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either the PAIR or Public PAIR. Status information for unpublished applications is available through the Private PAIR only. For more information about the pair system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Information regarding Patent Application Information Retrieval (PAIR) system can be found at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.



Angelica Perez  
Examiner



MATTHEW ANDERSON  
SUPERVISORY PATENT EXAMINER

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September 28, 2007